Using Technology to Improve Safety

3rd Eye Digital Solutions

Using Technology To Positively Impact Your Fleet

Safety

Operations

Maintenance

Fuel Tax / Usage Administration

3rd Eye Digital
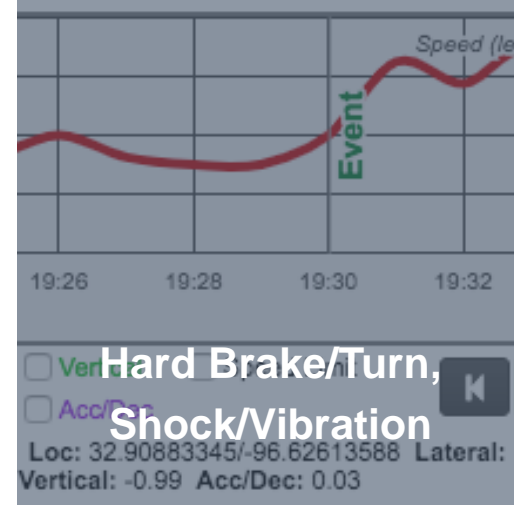
MobileVision™

Radar

ELD

How it Works: Triggered Events

- Event Recording Device
  - Records all installed cameras
  - Audio is recorded
- Gathers Information From:
  - Outside the vehicle
  - Live tracking of truck (GPS)
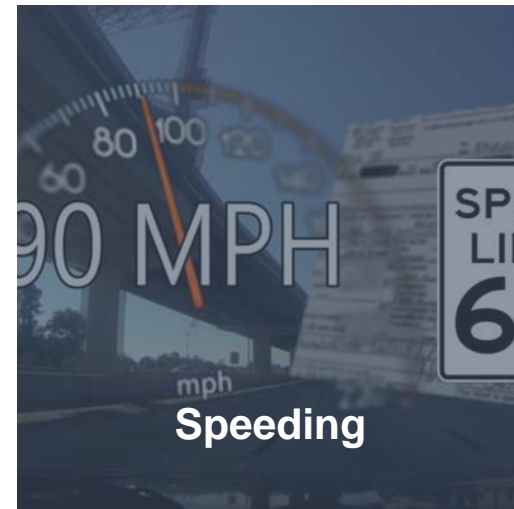 - J1939 Information – Speed, Telemetry
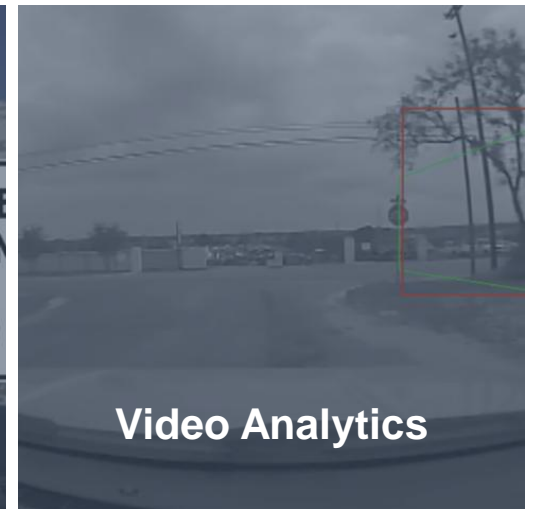
8 Seconds Before → ← 4 Seconds After

Hard Brake/Turn, Shock/Vibration

Loc: 32.90883345/-96.62613588 Lateral:
Vertical: -0.99 Acc/Dec: 0.03

Manual Trigger Service Exceptions

Speeding

Video Analytics

J1939 / OBDII – Yellow
GPS – Green
Ignition – Cyan
3G/4G Connectivity – Orange
ELD Status - Blue
Event Detection – Red

Video Event Trigger by Driver

SD Card Secured Inside Gateway

Hardware Features & Design

- Up to 256GB MicroSD card
  - Approximately 300 hours)
- Up to 8 cameras recording

- Real time video analytics and driver event processing

- Linux Operating System

- Open architect for future expansion

Protecting your people
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✓ Up to 6 additional cameras

✓ Never miss an accident

✓ Reliable Managed Service

✓ 25 frames/sec video clips

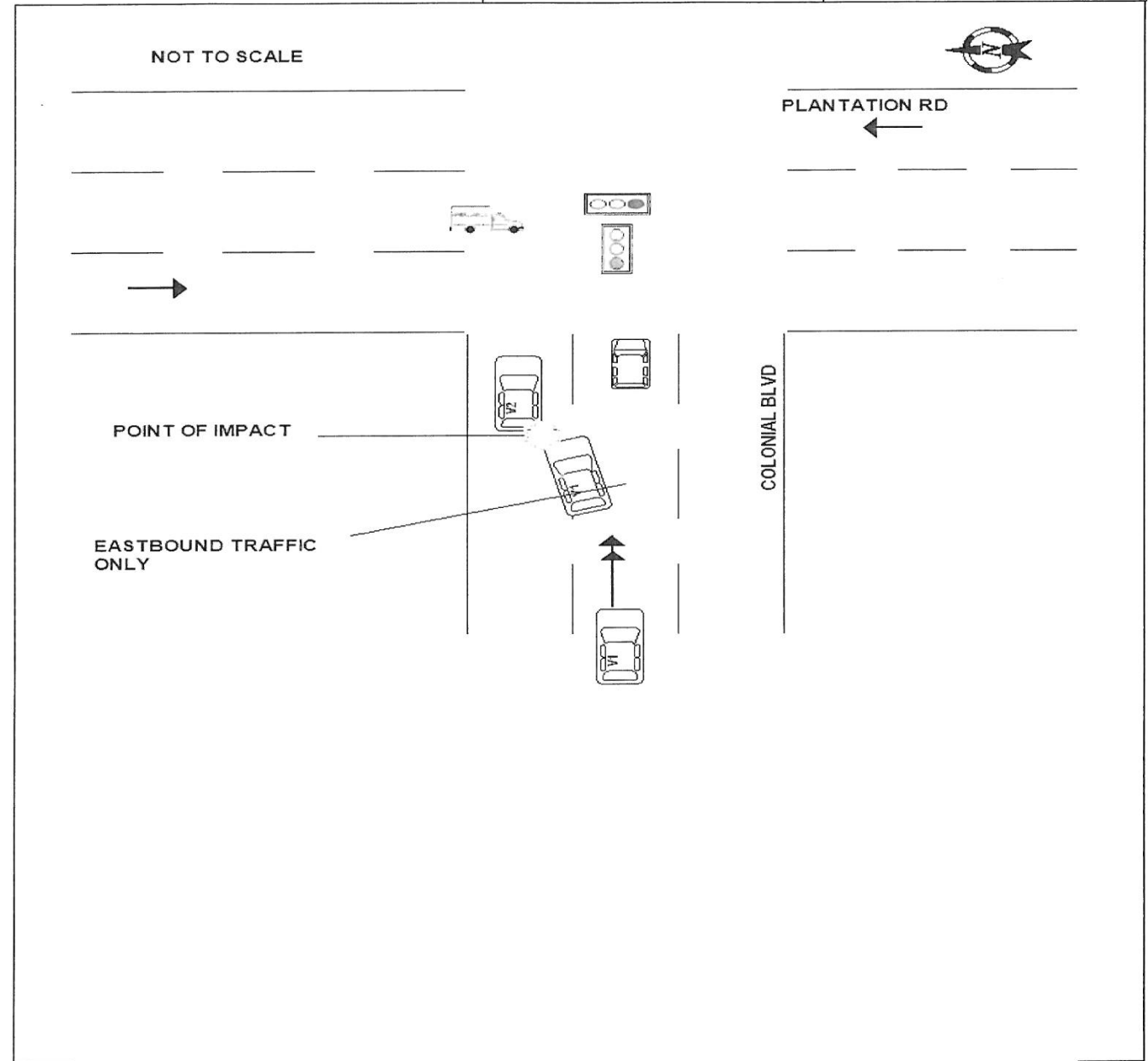✓ Advanced video analytics
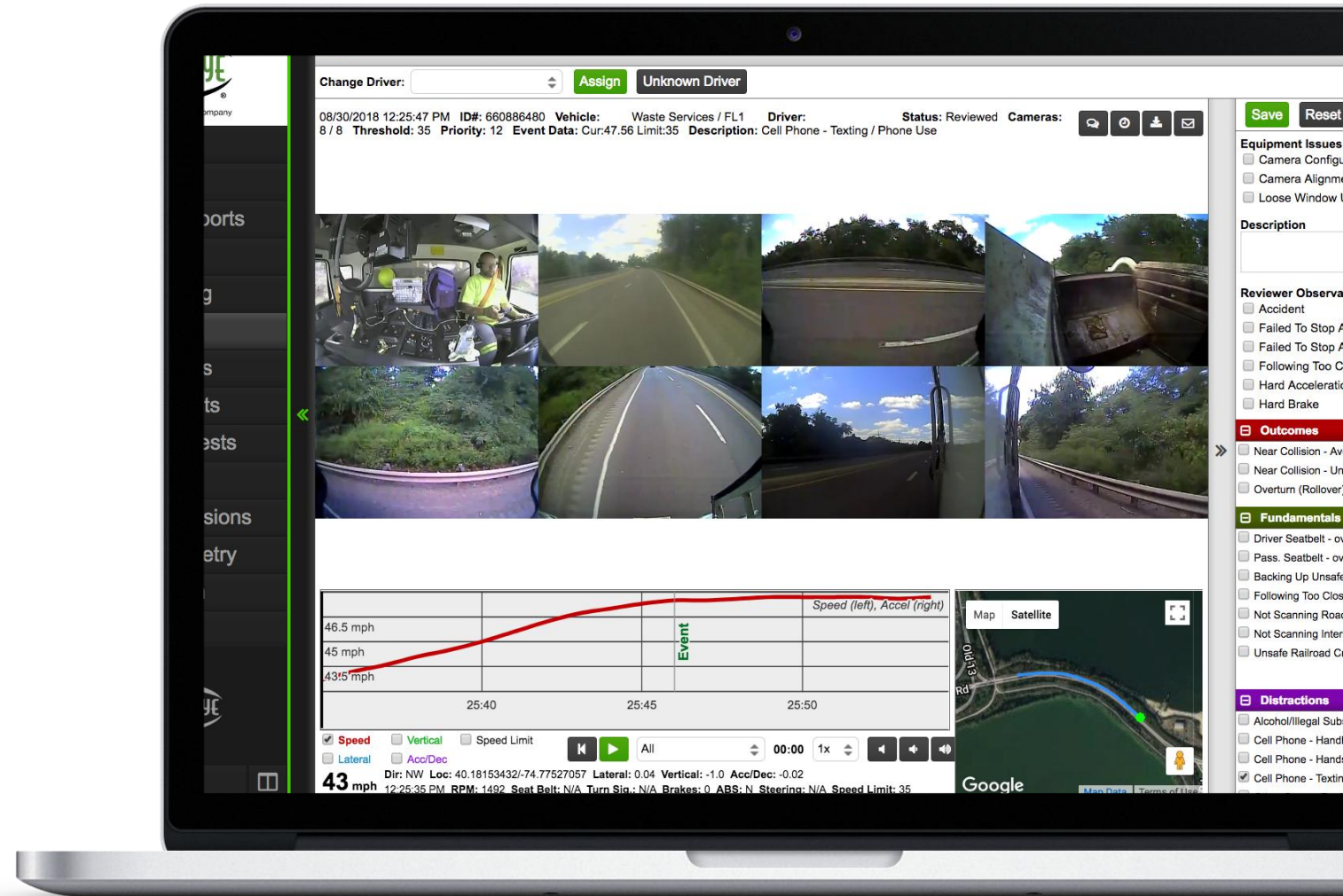
Protecting your people

Protecting your people

- Original police report had the roll off truck traveling in center lane.
- Reported stated that the roll off truck changed lanes and created the impact.
- Originally described as a rear end collision, ALL liability was placed on the roll off driver.
- After providing the police with the video from the truck, 100% of the responsibility was transferred from the roll off truck to the utility truck.
- In this case, a picture was worth a couple hundred thousand words.

DIAGRAM

| REPORTING AGENCY CASE NUMBER | HSMV CRASH REPORT NUMBER |
| 2015-04620 | 85802931 |

NOT TO SCALE

PLANTATION RD

POINT OF IMPACT

EASTBOUND TRAFFIC ONLY

COLONIAL BLVD

HSMV 90010 S

Page _____5_____ of _____7_____

3rd Eye 5 Step Safety Cycle

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Easy to use customized web portal for data management and coaching
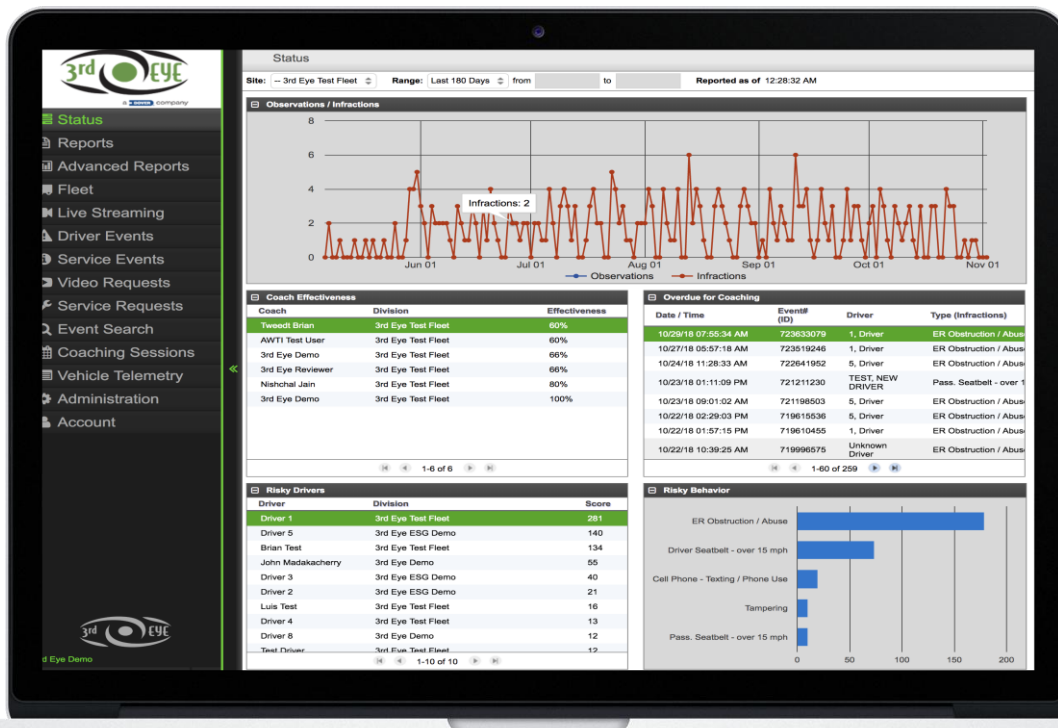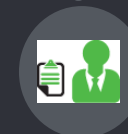
1 Event Recorder

2 Real Time Upload as Events Occur

3 Data evaluated for safety, operations and maintenance

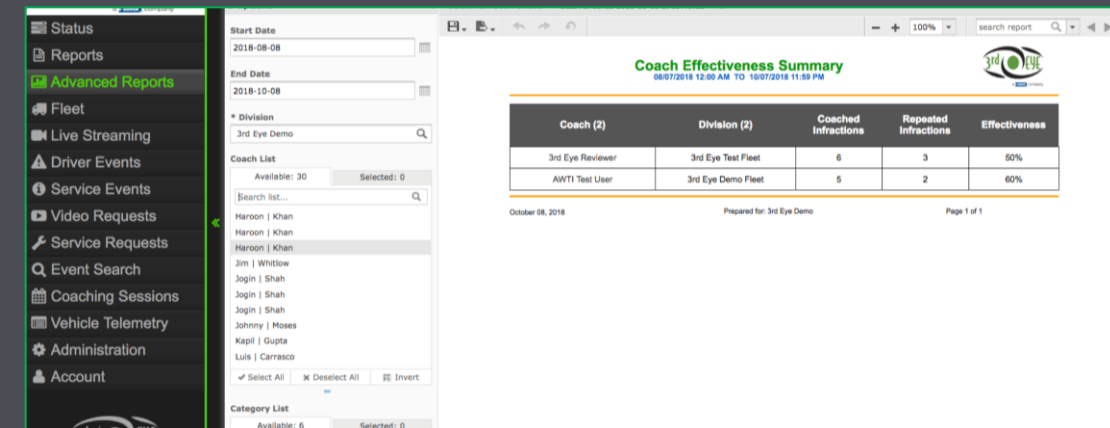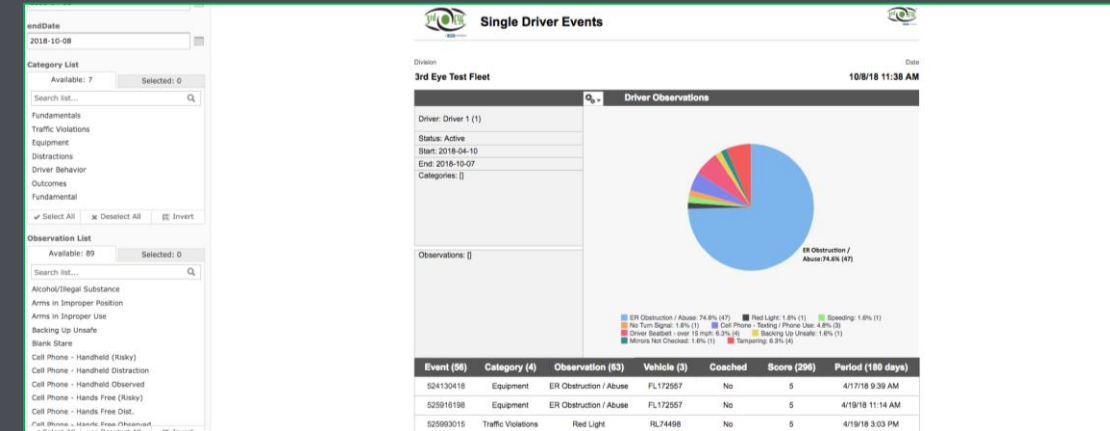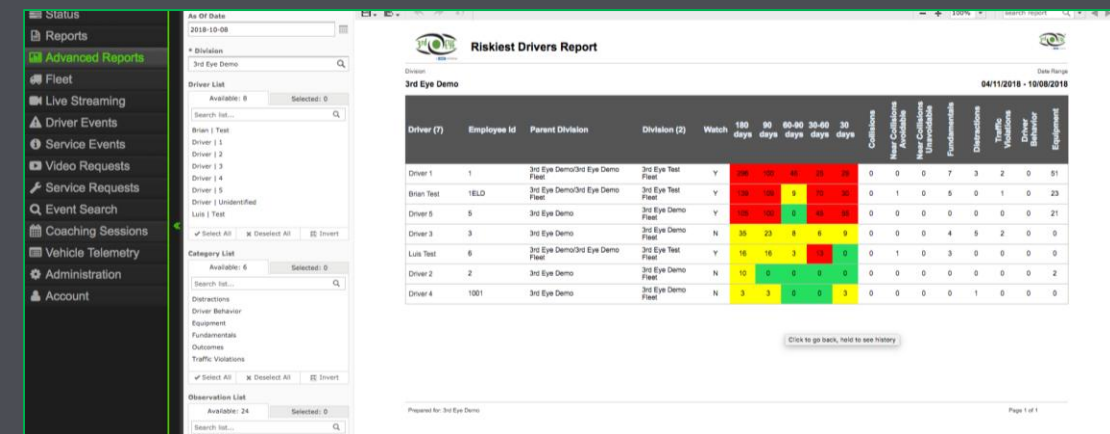4 Simplified Web Based Coaching

5 Automated KPI Reporting

3rd Eye Digital Solutions

Advanced Safety Reporting

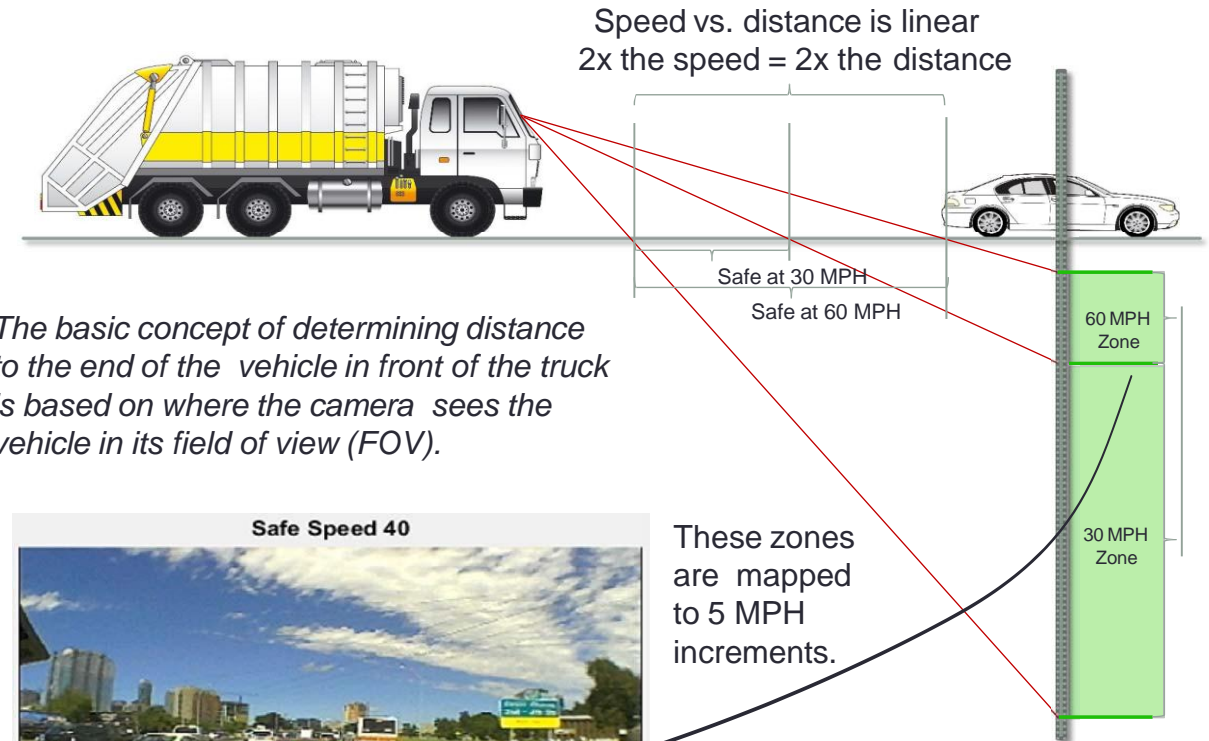✓ Custom Real Time Reporting

✓ Monitor Both Drivers and Coaches

Advanced Video Analytics

Speed vs. distance is linear
2x the speed = 2x the distance

Safe at 30 MPH

Safe at 60 MPH

60 MPH Zone

30 MPH Zone

The basic concept of determining distance to the end of the vehicle in front of the truck is based on where the camera sees the vehicle in its field of view (FOV).

These zones are mapped to 5 MPH increments.

The safe speed, based on the 3 second rule, is based on where the back of the vehicle is located in the zone mapping

Using Technology To Positively Impact Your Fleet

Safety   **Operations**   **Maintenance**   **Fuel Tax / Usage Administration**

Enhanced Awareness

- ✓ Custom KPI Metrics
- ✓ Site Conditions
- ✓ Evaluate Productivity
- ✓ Identify Opportunities
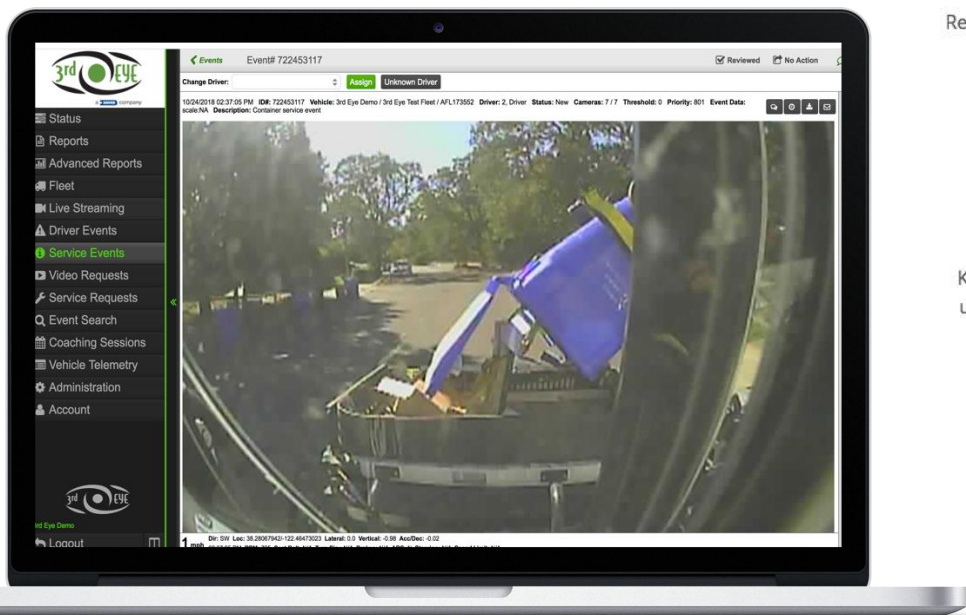
SAFETY

Wrap assets in 360° of camera coverage to monitor vehicle and driver environment in real time

ASSET UTILITZATION

Record and track the hours your assets are working and their exact location

ENGINE DIAGNOSTICS

Know the health of your engine with key utilization metrics captured in real time.

EQUIPMENT BEHAVIOR

Know the complete status of your garbage truck's hopper, compactor, and ancillary equipment in real time.

ON ROAD/OFF ROAD

Know when your assets are on highway and when they're not with the data to validate

CUSTOM SOLUTIONS

Refuse fleet solutions customized for your business needs.

Utilizing the Data
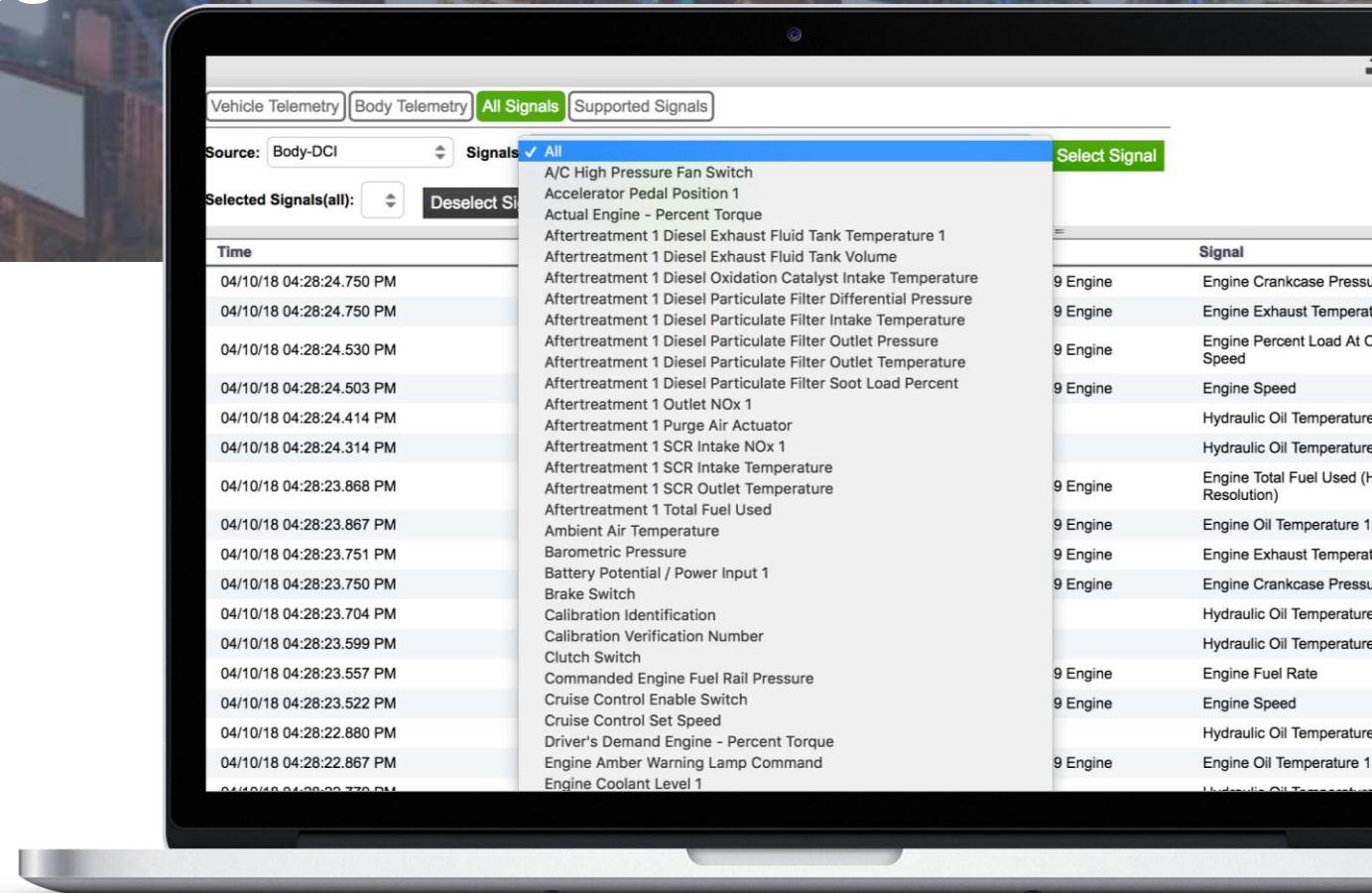
Service Verification   Contamination Recognition   Container Overages

Enhanced Fleet Awareness

✓ Body / Chassis Telemetry Data
✓ API / Back Office Integration
✓ Detailed Customer Tracking
✓ Positive Service Verification
✓ Industry Specific Reporting
✓ Live Camera Streaming
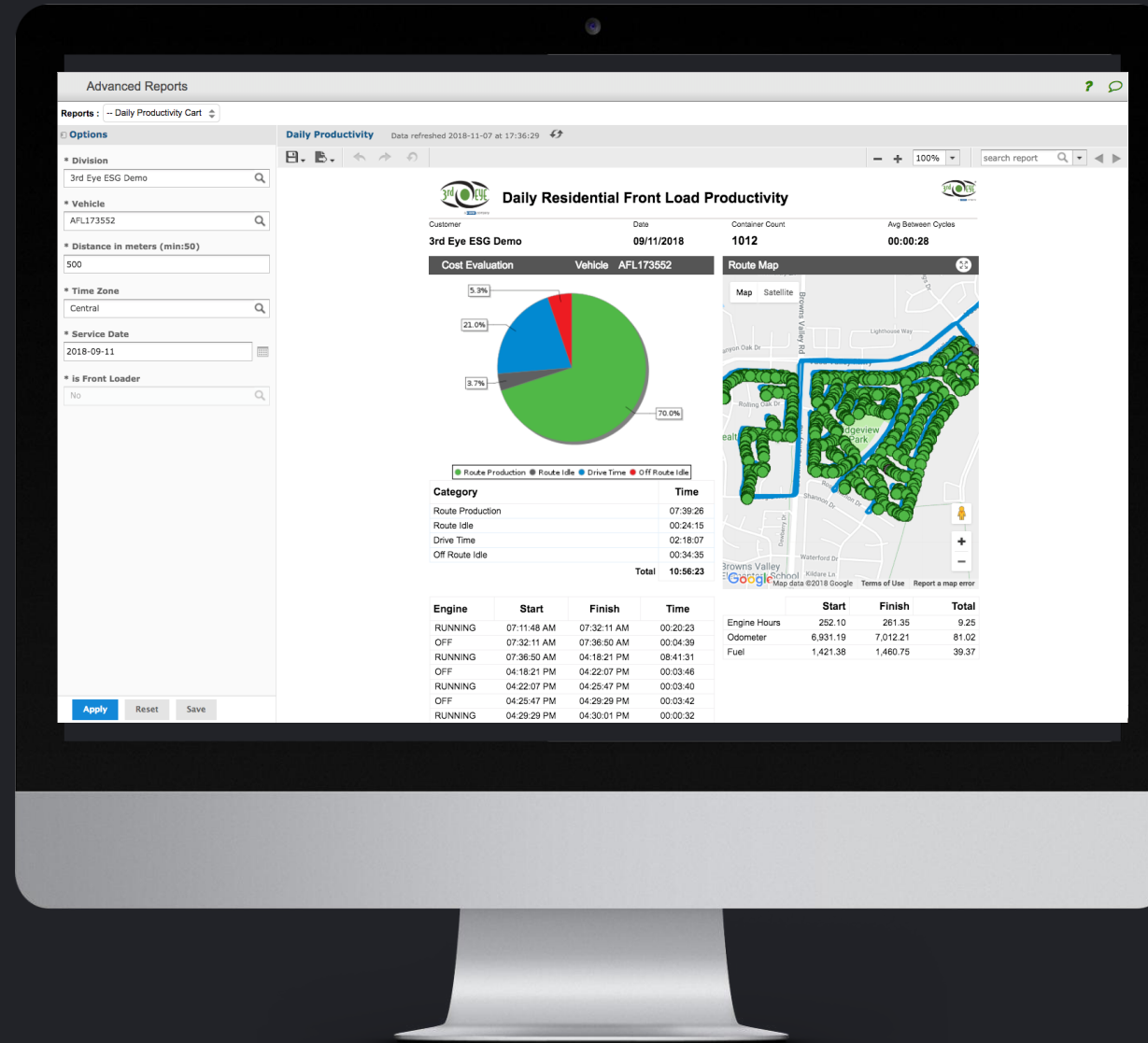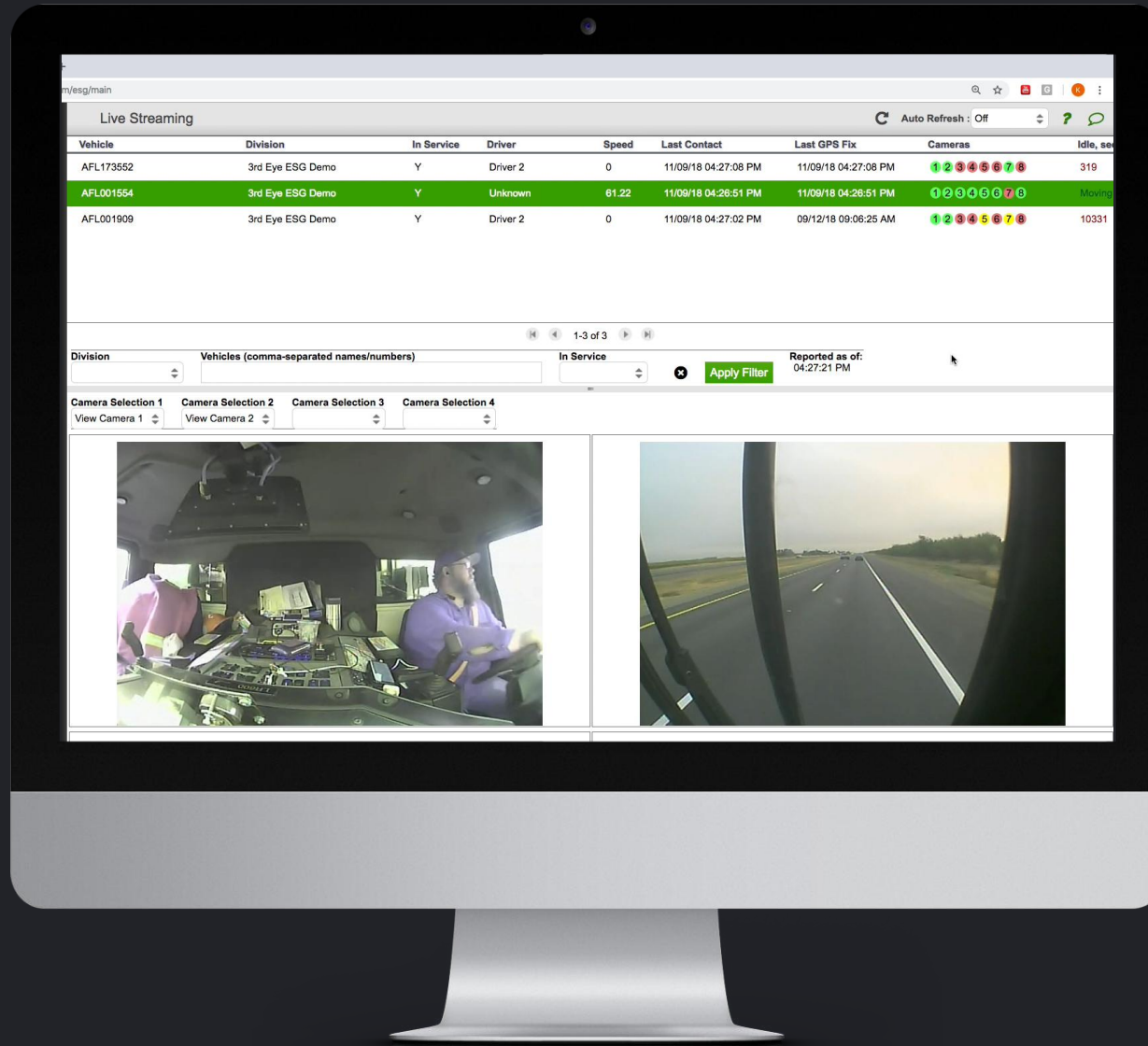✓ Electronic Logging Device

Productivity

Live Streaming

Service Verification

Vehicle Breadcrumb

Vehicle Idling Report

Vehicle Health Report

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Vehicle Health Report

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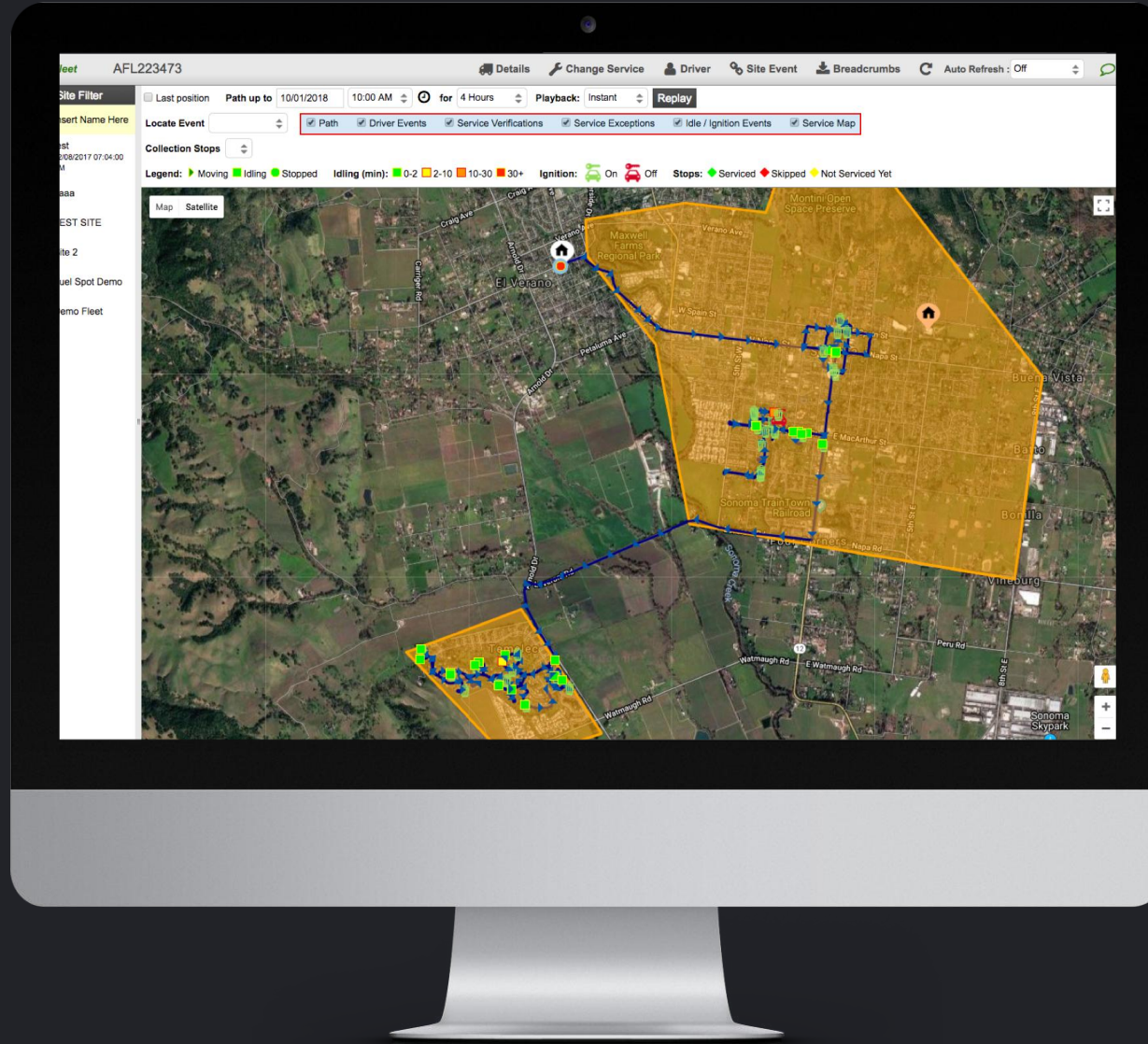
Service Verification
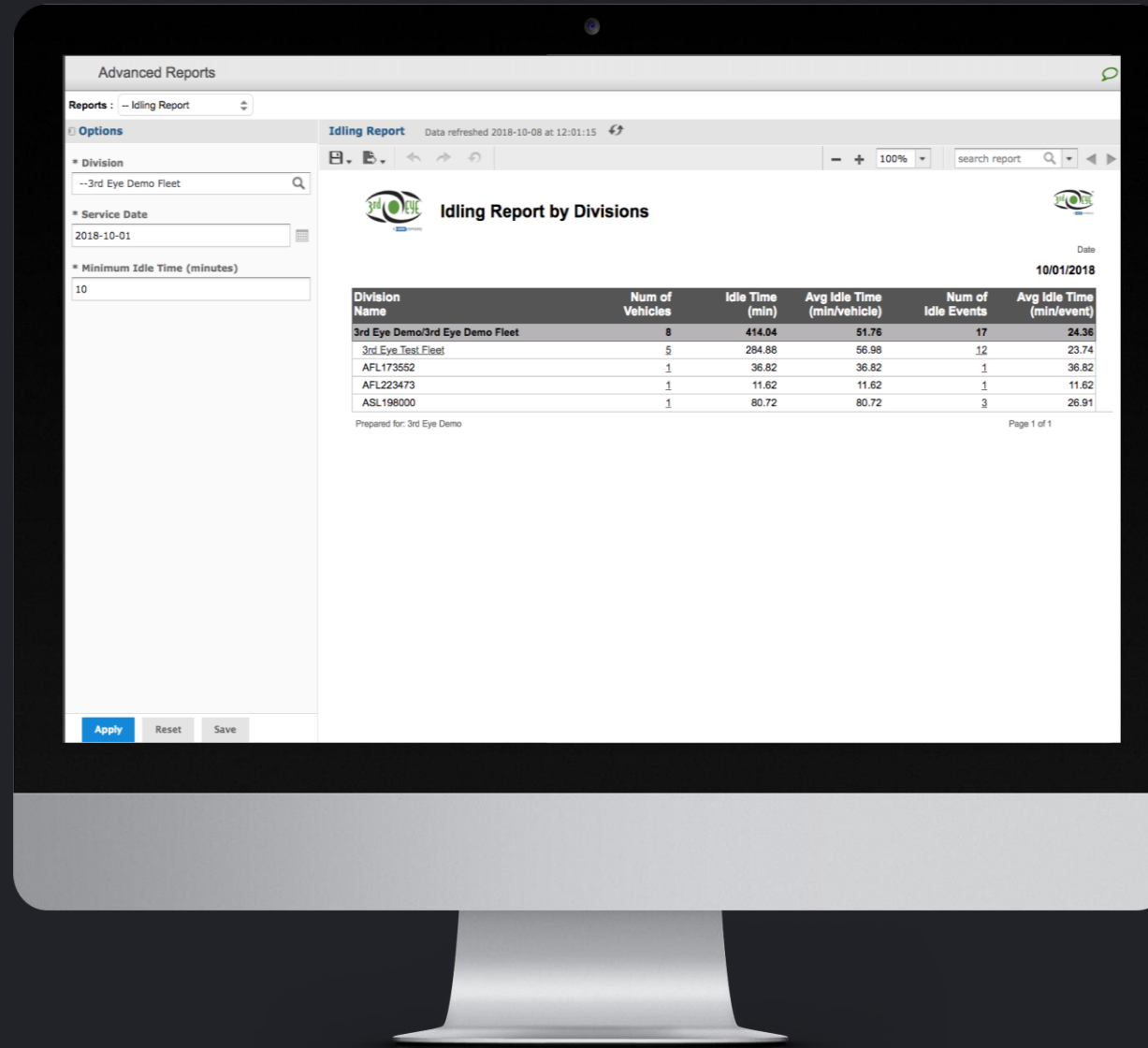
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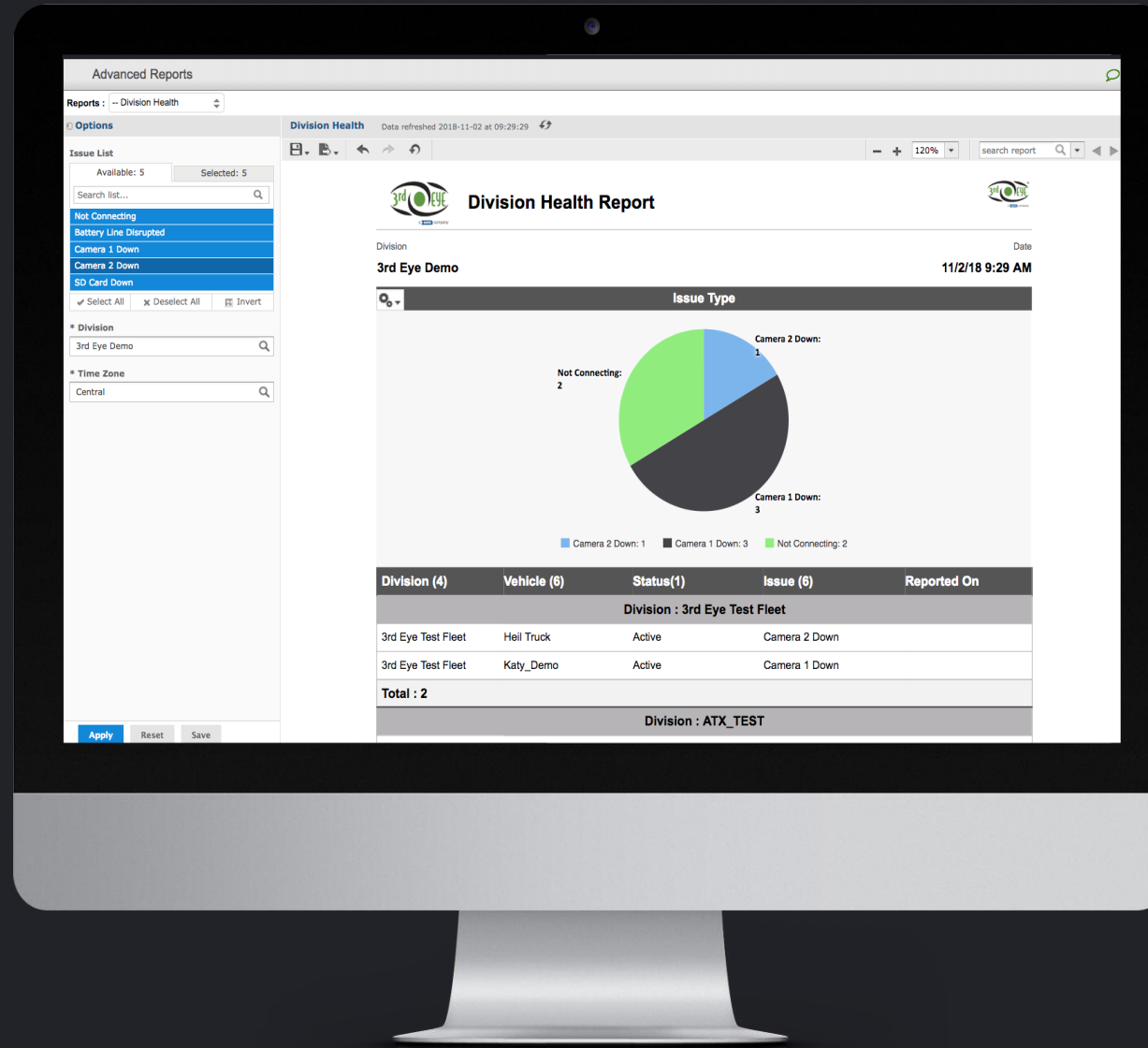
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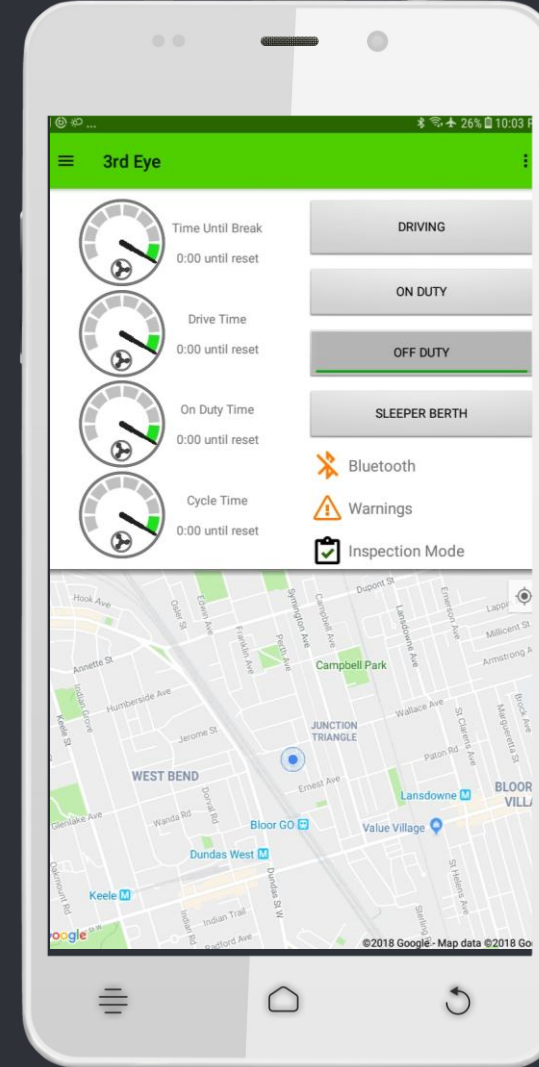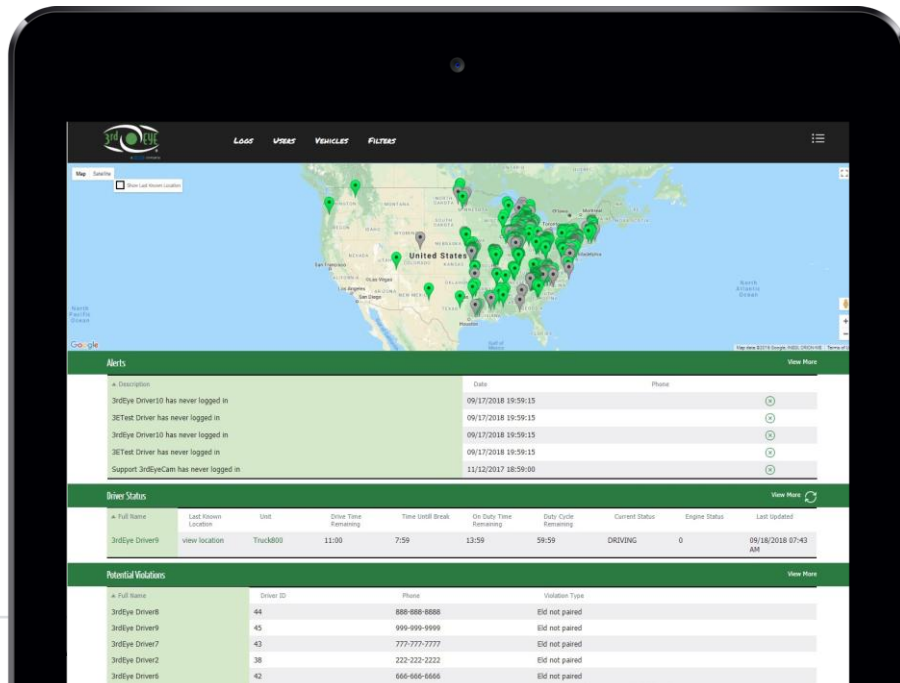
Productivity

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Service Verification

Vehicle Breadcrumb

Vehicle Idling Report

Vehicle Health Report

3rd Eye Digital Solutions

Electronic Logging Device

✓ Drive Time / Mileage Automatically Captured

✓ Back Office Management

3rd Eye FMCSA Compliant APP

Easy to Use Driver Interface

Quick Access to Driver Logs

Use with Android Tablet / Phone